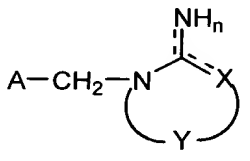
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Compounds useful as activators for α4β2 nicotinic acetylcholine receptors represented by formula (I):



(I)

wherein:

A is a phenyl group which is optionally substituted by one or more groups selected from the group consisting of C_1-C_4 alkyl groups~~, halogen atoms, nitro groups and cyano groups~~; or a heterocyclic group selected from the group consisting of thiophene, furan, pyran, pyrrole, pyrazole, ~~pyridine,~~ pyrimidine, pyrazine, pyridazine, imidazole, oxazole, isoxazole, ~~thiazole,~~ isothiazole, quinoline, isoquinoline, azaindole and tetrahydropyrimidine group, which is optionally substituted one or more times by C_1-C_4 alkyl group, or halogen atom;

the dotted line shows either the presence or absence of a bond;

n is 1 or 2; and

the group -Y-X- is -CH=C(R^8)-N= or -CH=C(R^9)-CH=N- (in which, R^8 and R^9 are a hydrogen atom or C_1-C_4 alkyl group; or a phenyl group which is optionally substituted one or more times by C_1-C_4 alkyl group, or halogen atom~~, nitro group, or cyano group)~~;

or pharmaceutically acceptable salts thereof.

2-3 (Cancelled)

4. (currently amended) A pharmaceutical composition comprising an effective amount of a compound as claimed in claim 1 or 18 and a pharmaceutically acceptable carrier or excipient.

5-7 (Cancelled)

8. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors comprising administering an effective amount of a compound as claimed in claim 1 or pharmaceutically acceptable salts thereof.

9. (Cancelled)

10. (previously presented) A pharmaceutical composition comprising one or more compounds claimed in claim 18 or pharmaceutically acceptable salts thereof as an active ingredient and a pharmaceutically acceptable carrier or excipient.

11-12 (Cancelled)

13. (previously presented) A composition as claimed in claim 10, comprising an effective amount of the one or more compounds as an activator for α4β2 nicotinic acetylcholine receptors and a pharmaceutically acceptable carrier or excipient.

14-16 (Cancelled)

17. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors comprising administering an effective amount of a compound as claimed in claim 18 or pharmaceutically acceptable salts thereof.

18. (currently amended) A compound ~~as claimed in claim 1,~~ selected from the group consisting of:

1-(6-chloro-3-pyridyl) methyl-2-imino-5-phenyl-1,2-dihydropyrimidine;

2-amino-1-(2-chloro-5-thiazolyl) methylimidazole;

2-amino-1-(6-chloro-3-pyridyl)methyl-4, 5-dimethylimidazole;

2-amino-1-(5-pyrimidyl)methylmidazole;

2-amino-1-(6-chloro-3-pyridyl)methyl-4-methylimidazole;

2-amino-1-(5,6 -dichloro-3-pyridyl)methylimidazole;

2-amino-1-(3-pyridyl)methylimidazole;

2-amino-1-(6-methyl-3-pyridyl)methylimidazole;

2-amino-1-(4-chlorobenzyl)imidazole; and

2-amino-1-(7-aza-3-indolyl)methylimidazole;

or a pharmaceutically acceptable salt thereof.

19-24. (cancelled)

25. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors as claimed in claim 8 or 17, for treating cerebral circulation diseases.

26. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors as claimed in claim 8 or 17, for treating neurodegenerative disease, dementia, motor ataxia, and neuropathy and mental disease.

27. (previously presented) The method of activating α4β2 nicotinic acetylcholine receptors according to claim 26, wherein said neurodegenerative disease is Alzheimer's disease or Parkinson's disease, said dementia is

cerebrovascular dementia, said motor ataxia is Tourette's syndrome, and said neuropathy and mental disease is neurosis during chronic cerebral infarction stage, anxiety or schizophrenia.

28. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors as claimed in claim 8 or 17 for improving the cerebral metabolism, neurotransmission functional disorder and memory disorder, for protecting brain, or having analgesic effect.

29. (previously presented) A method of activating α4β2 nicotinic acetylcholine receptors as claimed in claim 8 or 17, for treating inflammatory intestinal diseases.